	UNITED STATES DISTRICT COURT		
	NORTHERN DISTRICT OF NEW YORK		
	***************************************	****	
	CORNELL UNIVERSITY, a nonp York corporation, and CORNELL FOUNDATION, INC., a nonprofit	RESEARCH	
	corporation,	Plaintiffs,	01-CV-1974
N	HEWLETT-PACKARD COMPAN Delaware corporation,	VY, a	
		Defendant.	
	*****	*****	
	HEWLETT-PACKARD COMPAN Delaware corporation,	NY, a	
	Delaware corporation,	Counterclaimant,	
^	-v-		
CORNELL UNIVERSITY, a nonprofit New York corporation, and CORNELL RESEARCH FOUNDATION, INC., a nonprofit New York corporation,			
	corporation,	Counterdefendants.	
	******	*****	
	APPEARANCES:		
	Sidley Austin Brown & Wood Bryan K. Anderson, Esq., of Counsel David T. Miyamoto, Esq., of Counsel Denise L. McKenzie, Esq., of Counsel Edward G. Poplawski, Esq., of Counsel Olivia M. Kim, Esq., of Counsel Sandra S. Fujiyama, Esq., of Counsel 555 W. Fifth Street, 40th Floor Los Angeles, California 90013 and Cornell University, Office of Counsel James J. Mingle, Esq., of Counsel		
	Nelson E. Roth, Esq., of Counsel Valerie L. Cross, Esq., of Counsel		

300 CCC Building, Garden Avenue Ithaca, New York 14853 Attorneys for Plaintiffs/Counterdefendants

DLA Piper, Rudnick, Gray Cary US LLP Erin P. Penning, Esq., of Counsel John Allcock, Esq., of Counsel Sean C. Cunningham, Esq., of Counsel Arthur A. Wellman, Esq., of Counsel Licia E. Vaughn, Esq., of Counsel Stewart M. Brown, Esq., of Counsel 401 B Street, Suite 1700 San Diego, California 92101-4297 Harter, Secrest & Emery LP Jerauld E. Brydges, Esq. 1600 Bausch and Lomb Plaza Rochester, New York 14604-2711 Fish, Richardson Law Firm Barry K. Shelton, Esq., of Counsel 111 Congress Avenue Suite 810 Austin, Texas 78701 Attorneys for Defendant/Counterclaimant

Hon. Norman A. Mordue, Chief District Judge:

MEMORANDUM-DECISION AND ORDER

INTRODUCTION

Presently before the Court are five motions by defendant Hewlett Packard Company ("Hewlett Packard") for partial summary judgment. The Court further has before it three motions by plaintiffs Cornell University and Cornell Research Foundation, Inc. (collectively, "Cornell") to strike various submissions of Hewlett Packard. The motions were referred to United States Magistrate Judge David E. Peebles for a report and recommendation pursuant to 28 U.S.C. § 636(b)(1)(B) and Local Rule 72.3(c).

Magistrate Judge Peebles has issued an excellent and comprehensive Report and

Recommendation (Dkt. No. 787) addressing the motions. The parties have submitted objections and responses to the objections. Pursuant to 28 U.S.C. § 636(b)(1)(C), this Court conducts a *de novo* review of those parts of a magistrate judge's report and recommendation to which a party specifically objects. For the reasons set forth below, the Court accepts and adopts the Report and Recommendation in its entirety. In discussing the issues, the Court assumes that the reader is familiar with the Report and Recommendation and the history of the case, including the claimsconstruction decision. *See Cornell Univ. v. Hewlett-Packard Co.*, 313 F.Supp.2d 114 (N.D.N.Y. 2004).

THE MOTIONS

The following motions are presently before the Court:

- 1. Motion (Dkt. No. 688) by Hewlett Packard for partial summary judgment dismissing portions of Cornell's damages claims on the ground of laches.
- 2. Motion (Dkt. No. 689) by Hewlett Packard for partial summary judgment dismissing aspects of Cornell's damages claims on the ground of patent exhaustion.
- 3. Motion (Dkt. No. 690) by Hewlett Packard for partial summary judgment dismissing aspects of Cornell's patent infringement claims on the ground of non-infringement.
- 4. Motion (Dkt. No. 691) by Hewlett Packard for partial summary judgment dismissing certain of Cornell's patent infringement claims on the ground of patent invalidity.
- 5. Motion (Dkt. No. 692) by Hewlett Packard for partial summary judgment determining the royalty base.
- 6. Motion to strike (Dkt. No. 714) by Cornell relating to Hewlett Packard's motion (Dkt. No. 688) for partial summary judgment on the ground of laches.
- 7. Motion to strike (Dkt. No. 722) by Cornell relating to Hewlett Packard's motion (Dkt. No. 689) for partial summary judgment on the ground of

patent exhaustion.

8. Motion to strike (Dkt. No. 739) by Cornell relating to Hewlett Packard's motion (Dkt. No. 692) for partial summary judgment determining the royalty base.

DISCUSSION

1. Motion (Dkt. No. 688) by Hewlett Packard for partial summary judgment dismissing portions of Cornell's damages claims on the ground of laches.

In its motion for partial summary judgment dismissing portions of Cornell's damages claims on the ground of laches, Hewlett Packard contends that Cornell's delay in pursuing its claims under the 115 patent despite its awareness of Hewlett Packard's allegedly infringing activities resulted in prejudice to Hewlett Packard such that Cornell's recovery should be restricted to damages incurred since the commencement of this action. In recommending denial of summary judgment on this issue, Magistrate Judge Peebles wrote:

The equitable doctrine of laches must be applied cautiously, in recognition of the fact that it serves to deny a party, wholly or in part, of the benefits of pressing an otherwise meritorious claim. These principles, when applied to the circumstances presented in this case, suggest that laches is best considered based upon a fully developed record. In light of this and my finding that there are genuine issues of material fact surrounding when plaintiffs knew or reasonably should have known to undertake the duty to inquire regarding infringement; whether all or some of the delay in filing suit is excusable; whether HP suffered economic and/or evidentiary prejudice as a result of the delay; and whether there are any other considerations that could potentially militate against invoking the equitable doctrine of laches, I recommend that HP's motion for partial summary judgment on the basis of laches be denied.

(Citation omitted.)

Cornell agrees with Magistrate Judge Peebles' conclusion but objects to so much of the Report and Recommendation as may be read to "limit at trial the full assessment of facts

concerning license negotiations as a justification for delay." The Court does not read Magistrate

Judge Peebles' thorough discussion of the laches issue as imposing any such limitation.

Hewlett Packard objects to various aspects of the Report and Recommendation on this issue. On *de novo* review, this Court agrees with Magistrate Judge Peebles that Hewlett Packard has not established as a matter of law a delay in excess of six years giving rise to a presumption of laches. Nor has it established as a matter of law any other basis to apply the doctrine of laches to limit the time period for which Cornell may recover damages. Accordingly, the Court adopts Magistrate Judge Peebles' analysis and recommendation.

2. Motion (Dkt. No. 689) by Hewlett Packard for partial summary judgment dismissing aspects of Cornell's damages claims on the ground of patent exhaustion.

Hewlett Packard moves for partial summary judgment on its patent exhaustion defense.

The Federal Circuit has explained the doctrine of patent exhaustion as follows:

The law is well settled that an authorized sale of a patented product places that product beyond the reach of the patent. The patent owner's rights with respect to the product end with its sale, and a purchaser of such a product may use or resell the product free of the patent. This longstanding principle applies similarly to a sale of a patented product manufactured by a licensee acting within the scope of its license.

Intel Corp. v. ULSI Sys. Techs., Inc., 995 F. 2d 1566, 1568 (Fed. Cir. 1993) (citations omitted). The theory behind the exhaustion defense is that in an unconditional sale "the patentee has bargained for, and received, an amount equal to the full value of the goods." LG Elec., Inc. v. Bizcom Elec., Inc., 453 F.3d 1364, 1369 (Fed. Cir. 2006) (quoting B. Braun Med. Inc. v. Abbott Labs., 124 F.3d 1419, 1426 (Fed. Cir. 1997)). Hewlett Packard asserts that it is entitled as a matter of law to benefit from this defense with respect to all products it acquired from Intel Corporation ("Intel"), a licensee of the 115 patent pursuant to an agreement between Intel and

plaintiff Cornell Research Foundation ("CRF").

As Magistrate Judge Peebles explains:

To find patent exhaustion in this case, based upon the agreement between CRF and Intel, the court must conclude that 1) an authorized sale was made by Intel of the PA-8000 processors; 2) there were no conditions placed on either the sale from Intel to HP [Hewlett Packard] or the license under which it was accomplished; 3) the sale occurred under the United States patent laws; and 4) the processors sold to HP embodied the "essential feature" of the patents "such that they have no reasonable use which does not infringe the [patent]."

(Citation omitted).

With respect to the first element – whether Intel made an authorized sale to Hewlett Packard of the PA-8000 processors – Magistrate Judge Peebles found questions of fact. Hewlett Packard takes issue with Magistrate Judge Peebles' formulation of this element, contending that the word "sale" is too narrow, and that, had he applied the proper standard, Magistrate Judge Peebles would necessarily have found patent exhaustion. In fact, however, Magistrate Judge Peebles' analysis makes it clear that he does not apply the term "sale" in an improperly narrow manner, that he applies the proper standard, and that he correctly finds questions of fact on the exhaustion issue.

Magistrate Judge Peebles further finds that questions of fact exist regarding the third element, that is, whether the sale or disposition (if any) occurred under United States patent laws. He bases this conclusion on evidence suggesting that Intel delivered certain of the processors in issue to Hewlett Packard in Ireland. This Court agrees. Hewlett Packard's motion for partial summary judgment on patent exhaustion is denied.

Cornell objects to one aspect of Magistrate Judge Peebles' discussion of the patent exhaustion issue, *i.e.*, his legal conclusion that the method claims in the 115 patent are subject to

the exhaustion defense. The Court agrees with Magistrate Judge Peebles' discussion of the relevant cases, *see LG Elec.*, 453 F.3d at 1370; *Glass Equip. Dev., Inc. v. Besten, Inc.*, 174 F. 3d 1337, 1341 n.1 (Fed. Cir. 1999); *Bandag, Inc. v. Al Bolser's Tire Stores, Inc.*, 750 F.2d 903, 924 (Fed. Cir. 1984), his excellent analysis, and his conclusion that a contrary ruling could lead to "absurd and potentially harsh results" in a case such as this. The Court adopts the Report and Recommendation on this motion in all respects.

3. Motion (Dkt. No. 690) by Hewlett Packard for partial summary judgment dismissing certain of Cornell's patent infringement claims on the ground of non-infringement.

The Court adopts Magistrate Judge Peebles' analysis of the relevant law on the issue of non-infringement. The Court further adopts his view that there are questions of fact on whether the accused product infringes patent claims 1, 2, 6, 14 and 15, and 18. Therefore, the Court denies Hewlett Packard's motion for partial summary judgment on non-infringement of claims 1, 2, 6, 14 and 15, and 18.

With respect to claims 7 through 12, 16, 17, and 19, Hewlett Packard contends there is no infringement as a matter of law, either literally or under the doctrine of equivalents. Cornell concedes that claims 7 through 12, 16, 17 and 19 detect only WAR nonessential dependencies. Cornell further concedes that Hewlett Packard's accused processors do not perform the function of tracking WAR nonessential dependencies, and that therefore there is no literal infringement. The Court adopts Magistrate Judge Peebles' recommendation of the entry of partial summary judgment in Hewlett Packard's favor finding no literal infringement of claims 7 through 12, 16, 17, and 19.

Cornell asserts, however, that the accused processors infringe claims 7 through 12, 16, 17, and 19 under the doctrine of equivalents. The general rule is that "[i]nfringement may be

found under the doctrine of equivalents when ... every limitation of the asserted claim, or its equivalent, is found in the accused subject matter, the latter differs from what is literally claimed only insubstantially, and it performs substantially the same function in substantially the same way to achieve substantially the same result." *Wright Medical Tech., Inc. v. Osteonics Corp.*, 122 F.3d 1440, 1444 (Fed. Cir. 1977) (citing *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 40 (1997)). The Federal Circuit subsequently clarified that the test for equivalence is the "insubstantial difference" test, and that the "function/way/result" test "offers additional guidance on the question of equivalence." *Dawn Equip. Co. v. Kentucky Farms Inc.*, 140 F.3d 1009, 1016 (Fed. Cir. 1998).

As noted, it is undisputed that claims 7 through 12, 16, 17 and 19 detect only WAR nonessential dependencies and that the accused processors do not track WAR nonessential dependencies. In asserting the doctrine of equivalents, Cornell argues that it has adduced specific proof that, at least when implementing a process known as "nullification," the accused processors use a $\beta(D)$ field to track whether an instruction is free of WAW nonessential dependencies. Cornell further argues that it has shown that there is an "insubstantial difference" between using a $\beta(D)$ field to track WAW nonessential dependencies (as in the accused product) and using it to track WAR nonessential dependencies (as in claims 7 through 12, 16, 17, and 19). Accordingly, Cornell concludes, there is sufficient evidence from which a finder of fact could find infringement under the doctrine of equivalents with respect to claims 7 through 12, 16, 17, and 19.

In advancing its argument, Cornell relies on the analysis by its expert, Dr. James Smith, in his June 22, 2006 expert report and his November 10, 2006 declaration. The Court agrees with Magistrate Judge Peebles that the June 22, 2006 expert report, insofar as it addresses the question

of equivalents, is not conclusory within the meaning of *Network Commerce, Inc. v. Microsoft Corp.*, 422 F.3d 1353, 1363 (Fed.Cir. 2005). The Court further rejects Hewlett Packard's request that Dr. Smith's reports be stricken on procedural grounds.

Dr. Smith states in his June 22, 2006 expert report:

HP literally infringes all limitations of claim 7 [and claim 16] except for the step of determining the number of times the individual registers are used as source registers in preceding uncompleted instructions. As to that step, the PA-8000 performs an equivalent step at least in the case of nullification by determining the number of times an individual unrenamed register is used as the most recent destination register in preceding unretired instructions.

Thus for this step, the PA-8000 performs a substantially similar function in substantially the same way and gets the same result. In particular the PA-8000 tracks the number of times an unrenamed register is designated as the most recent destination register so that WAW dependencies can be resolved.

The report sets forth a detailed analysis supporting this statement. In his declaration dated November 10, 2006, Dr. Smith adds:

With respect to the function/way/result test for false or non-essential dependencies, the *function* is tracking non-essential dependencies. The *way* is by using a piece of hard-ware that holds what computer designers refer to as "state" – in particular, this state represents a count of writes to the destination register associated with the non-essential dependency field.... The *result* is the determination that an instruction is free of non-essential dependencies.

(Emphasis in original.)

Magistrate Judge Peebles states in this respect:

This analysis by Dr. Smith, however, ignores the additional steps specified in the disputed claims, which speak specifically to detection of WAR dependencies. It is undisputed that the accused circuitry in the HP-8000 processors, by contrast, at best track WAW false dependencies. Consequently, while a reasonable factfinder might well conclude that the PA-8000 processors perform the function of tracking false dependencies, a

function specified in the disputed claims, and perhaps even in the same way as under the '115 patent, the result – detection of WAW dependencies – is not the same as the discernment taught in those claims. As Dr. Smith himself acknowledged, WAR and WAW are two distinctly differen[t] species, and are not interchangeable. The detection of one of these two types of nonessential dependencies thus reveals no information as to whether the other type is present within the instruction buffer.... [N]o reasonable factfinder could conclude that the differences in detection of WAW and WAR dependencies is insubstantial[.]

(Citations to record omitted.)

The Court finds that the additional step specified in claims 7 and 16 of "determining the number of times that individual registers in said processor are used as source registers in preceding uncompleted instructions" precludes a factfinder from concluding that "every limitation of the asserted claim, or its equivalent, is found in the accused subject matter, the latter differs from what is literally claimed only insubstantially, and it performs substantially the same function in substantially the same way to achieve substantially the same result." *Wright Medical*, 122 F.3d at 1444. As such, no factfinder could find infringement under the doctrine of equivalents with respect to claim 7, its dependent claims 8 through 12, claim 16, its dependent claim 17, and the analogous claim 19. Accordingly, the Court adopts Magistrate Judge Peebles' recommendation that all claims of infringement, both literal and under the doctrine of equivalents, with respect to patent claims 7 through 12, 16, 17 and 19 be dismissed.

4. Motion (Dkt. No. 691) by Hewlett Packard for partial summary judgment dismissing certain of Cornell's patent infringement claims on the ground of patent invalidity.

On this motion, Hewlett Packard argues that patent claims 1, 2, 6, 14, 15, and 18 are invalid because they necessarily include a feature that is not disclosed in the written description as required by 35 U.S.C. § 112. Specifically, Hewlett Packard contends that, inasmuch these claims do not describe a $\beta(D)$ field for detection of false dependencies, they necessarily include

register renaming or some other technique to detect false dependencies, a feature that is not disclosed in the written description. Magistrate Judge Peebles recommends denial of summary judgment on this ground.

In its objection to the Report and Recommendation, Hewlett Packard argues that the patent "nowhere describes a dispatch stack lacking a $\beta(D)$ field." Hewlett Packard adds that the patent "does not teach how to remove β dependencies, and in all embodiments includes a $\beta(D)$ field." The Court rejects this argument, which essentially recasts an argument raised by Hewlett Packard and rejected by the Court in the claims-construction phase of this case, *i.e.*, that in all 19 claims of the 115 patent, the dispatch stack includes a $\beta(D)$ field. Likewise, the other objections raised by Hewlett Packard on this motion lack merit.

Cornell raises no objection to the Report and Recommendation in this regard. On *de novo* review, the Court adopts Magistrate Judge Peebles' Report and Recommendation on this motion in all respects. Hewlett Packard's motion (Dkt. No. 691) for partial summary judgment is denied.

5. Motion (Dkt. No. 692) by Hewlett Packard for partial summary judgment determining the royalty base.

Hewlett Packard moves for partial summary judgment determining the royalty base to be applied to an award of reasonable royalties in the event of a finding of infringement. Pursuant to statute, "[u]pon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court." 35 U.S.C. § 284. As Magistrate Judge Peebles notes, in establishing a reasonable royalty, the factfinder must determine a hypothetical royalty to which the parties would have agreed in an arms-length

license negotiation.

The issue on this motion centers on the question of the product sales which would be subject to the royalty in the event of a finding of infringement. Cornell seeks a royalty based on the entire market value of Hewlett Packard's systems containing the patented circuitry, that is, the PA-8000 processors, servers, and workstations, on the ground that the value of the entire system is attributable to the patented circuitry. Hewlett Packard contends that the entire market value method is inapplicable as a matter of law and in any event is not supported by the facts. Hewlett Packard seeks partial summary judgment limiting the product sales upon which a royalty calculation may be based.

Magistrate Judge Peebles recommends denial of partial summary judgment, finding some legal and factual support for Cornell's position. On *de novo* review, the Court agrees with Magistrate Judge Peebles' thorough treatment of these issues. The Court adopts the Report and Recommendation in this respect and denies the motion.

6. Motion to strike (Dkt. No. 714) by Cornell relating to Hewlett Packard's motion (Dkt. No. 688) for partial summary judgment on the ground of laches.

Cornell moves to strike the declaration of John Wheeler, offered by Hewlett Packard in connection with its laches defense. Magistrate Judge Peebles finds no basis to strike Wheeler's declaration. The Court agrees, and the motion is denied.

7. Motion to strike (Dkt. No. 722) by Cornell relating to Hewlett Packard's motion (Dkt. No. 689) for partial summary judgment on the ground of patent exhaustion.

Cornell moves to strike the declaration of Tom Shrader, submitted in support of Hewlett

Packard's patent exhaustion motion. Magistrate Judge Peebles rejects Cornell's argument that

Shrader's declaration should be precluded because it constitutes expert evidence, and Shrader was

not identified as an expert during discovery. Magistrate Judge Peebles finds, however, that portions of Shrader's declaration should be stricken on the ground that he lacks the specialized knowledge to testify as to the inferences to be drawn regarding the manufacture of the PA-8500 and PA-8600 processors, specifically whether those processors were manufactured by Intel and sold to Hewlett Packard, or instead manufactured by Hewlett Packard utilizing Intel's facilities. Accordingly, Magistrate Judge Peebles recommends that the motion to strike the Shrader declaration be granted in part, and that specified portions of Shrader's declaration (Exh. 4 to Brydges Decl., Dkt. No. 698) including paragraphs 13-16, 20, 22, 24, and 25, be stricken and not considered in connection with Hewlett Packard's patent exhaustion motion.

Cornell also seeks an order striking Hewlett Packard's references to the Planning

Operating Guideline on the ground that Hewlett Packard prevented Cornell from taking discovery with respect thereto; Hewlett Packard's references to extrinsic evidence on the meaning of the Hewlett Packard-Intel Alliance Agreement on the ground that Hewlett Packard prevented plaintiffs from obtaining such evidence during discovery; and Hewlett Packard's references to the Intel Settlement Agreement and any negotiations by CRF to license others to the 115 patent, on the ground that they are inadmissible under federal Rules of Evidence 408. Magistrate Judge Peebles recommends against granting this aspect of the motion.

Upon review of the record and Magistrate Judge Peebles' Report and Recommendation, the Court adopts Magistrate Judge Peebles' recommendations. Accordingly, Cornell's motion to strike Shrader's declaration is granted in part. The motion is denied in all other respects.

8. Motion to strike (Dkt. No. 739) by Cornell relating to Hewlett Packard's motion (Dkt. No. 692) for partial summary judgment determining the royalty base.

Cornell seeks an order striking the declaration of Gregg Huff, offered by Hewlett Packard

in connection with its motion to limit plaintiffs' royalty base. Magistrate Judge Peebles declines to recommend that the Huff declaration should be stricken on the ground that it amounts to expert opinion by one who was not disclosed as an expert during discovery. He recommends that excerpts of the Huff declaration, Exh. 10 to Brydges Decl. (Dkt. No. 707), addressing the issue of customer demand, including paragraphs 6 and 7, and addressing technical matters, including paragraphs 11 and 12, be stricken from consideration on these motions, on the ground that his competence to give evidence on these matters has not been demonstrated.

The Court adopts Magistrate Judge Peebles' recommendation. Cornell's motion is granted to the extent of striking the specified portions of Huff's declaration and otherwise denied.

Redaction of settlement amount

There is no basis to disturb Magistrate Judge Peebles' ruling denying Cornell's request for redaction from the Report and Recommendation of the dollar amount of the Intel-Cornell license.

Hewlett Packard's objections to Cornell's submissions

The Court agrees with and adopts Magistrate Judge Peebles' recommendations regarding Hewlett Packard's objections to a variety of Cornell's evidentiary submissions.

CONCLUSION

It is therefore

ORDERED that the Report and Recommendation of United States Magistrate Judge

David E. Peebles is approved and adopted; and it is further

ORDERED that Hewlett Packard's motion for partial summary judgment on the ground of laches (Dkt. No. 688) is denied; and it is further

ORDERED that Hewlett Packard's motion for partial summary judgment on the basis

of patent exhaustion (Dkt. No. 689) is denied; and it is further

ORDERED that Hewlett Packard's motion for partial summary judgment on the basis of invalidity (Dkt. No. 691) is denied; and it is further

ORDERED that Hewlett Packard's motion for partial summary judgment on the basis of non-infringement (Dkt. No. 690) is granted, in part, and all claims of infringement, both literal and under the doctrine of equivalents, with respect to claims 7 through 12, 16, 17 and 19 of the 115 patent are dismissed, and the motion is otherwise denied; and it is further

ORDERED that Hewlett Packard's motion for partial summary judgment on the basis of royalty base (Dkt. No. 692) is denied; and it is further

ORDERED that plaintiff's motion to strike (Dkt. No. 714) relating to Hewlett Packard's motion (Dkt. No. 688) is denied; and it is further

ORDERED that plaintiff's motion to strike (Dkt. No. 722) relating to Hewlett Packard's motion (Dkt. No. 689) is granted to the extent of striking specified portions of Shrader's declaration, including paragraphs 13-16, 20, 22, 24, and 25, and is otherwise denied; and it is further

ORDERED that plaintiff's motion to strike (Dkt. No. 739) relating to Hewlett Packard's motion (Dkt. No. 692) is granted to the extent of striking the portions of Gregg Huff's declaration addressing the issue of customer demand, including paragraphs 6 and 7, and addressing technical matters, including paragraphs 11 and 12, and is otherwise denied.

IT IS SO ORDERED.

September 24, 2007 Syracuse, New York

Norman A. Mordue

Chief United States District Court Judge

rund Marke